

Amendments to the Claims:

1. (Currently Amended) An isolated antibody that specifically binds to loop 6 of human CCR5 and inhibits infection of immunodeficiency virus of human cells, wherein the antibody comprises a heavy chain variable region of SEQ ID NO: 55 and a light chain variable region of SEQ ID NO: 58, a heavy chain variable region of SEQ ID NO: 56 and a light chain variable region of SEQ ID NO: 59, or a heavy chain variable region of SEQ ID NO: 57 and a light chain variable region of SEQ ID NO: 60.
2. (Currently Amended) The antibody of claim 1, wherein the antibody specifically binds to loop 6 of human CCR5 and inhibits infection of immunodeficiency virus of human cells ~~the immunodeficiency virus is human immunodeficiency virus type I, human immunodeficiency virus type 2 and simian immunodeficiency virus.~~
3. (Original) The antibody of claim 1, wherein the antibody is a monoclonal antibody.
4. (Original) The antibody of claim 3, wherein the monoclonal antibody is a single chain antibody.
- 5-11. (Canceled)
12. (Currently Amended) The antibody of claim [1] 4, wherein ~~the light chain variable region of the single chain antibody comprises an amino acid sequence selected from SEQ ID Nos: 37, 39, and 41~~ 27, 29 and 31.
13. (Currently Amended) The antibody of claim [1] 4, wherein ~~the antibody is a single chain antibody~~ has an amino acid sequence of SEQ ID NO: 27.
14. (Currently Amended) The antibody of claim [1] 4, wherein the antibody is encoded by a polynucleotide selected from the group consisting of SEQ ID NOs: ~~18, 20, 22, 26, 28, and 30.~~

15. (Currently Amended) The antibody of claim 1, wherein the antibody specifically binds to the loop 6 of human CCR5 which comprises SEQ ID NO: 2.

16. (Original) A recombinant expression vector encoding a polypeptide selected from the group consisting of SEQ ID NOs: 36-41.

17. (Original) The recombinant expression vector of claim 16 is a bacterial, yeast, plant, mammalian or viral expression vector.

18. (Original) A recombinant cell expressing a polypeptide selected from the group consisting of SEQ ID NOs: 36-41.

19. (Original) The recombinant cell of claim 18 is a bacterial, yeast, plant or mammalian cell.

20. (Original) The recombinant cell of claim 18 is a human cell.

21-35. (Canceled)